

September 2011 Weather in Review

September 2011 maintained the trend of drier and much warmer than usual conditions. After many record highs from June to August, more record highs came in September. The cold front on September 4th brought several cool mornings the 5th through the 11th. Record daily lows were observed at Austin Bergstrom the 6th to the 10th, and at Del Rio on the 6th and 7th. The dryness across the region helped to enhance the contrast between warm and cool periods in September. September of 2011 tied with September 2005 for the warmest September at Austin Mabry; tied with September 1962 for the 10th warmest at Del Rio; and tied with September 1933 for the 5th warmest September at San Antonio. September 2011 tied with September 1945, 1960, and 1997 for the 19th warmest September at Austin Bergstrom. The combination of the coolest average September daily low of 63.3 at Austin Bergstrom coupled with the 2nd warmest daytime high of 97.1, kept the average temperature for Austin Bergstrom out of the top 10 warmest Septembers. Even though Fall officially began at 405 AM CDT on Friday, September 23, unseasonably warm days persisted the weekend of the 24th and 25th through September 29th. The high of 101 at Austin Mabry and 99 at Austin Bergstrom on September 29th were daily record highs for September 29th and the highest temperature for so late in the season at Austin Mabry and Austin Bergstrom.

The warmest Septembers at Austin Mabry from 1854 to 2011 are listed below.

1. September of 2005 and 2011 84.4
2. September of 1911 84.2
3. September of 1977 83.8
4. September of 1933 83.4
5. September of 1884 83.2

The warmest Septembers at Austin Bergstrom from 1943 to 2011 are listed below.

1. September of 2005 84.1
2. September of 1954 83.8
3. September of 1977 83.3
4. September of 1956 82.6
5. September of 1955 and 1985 82.3
- ...
19. September of 1945, 1960, 1997 and 2011 80.2

The warmest Septembers at Del Rio from 1906 to 2011 are listed below.

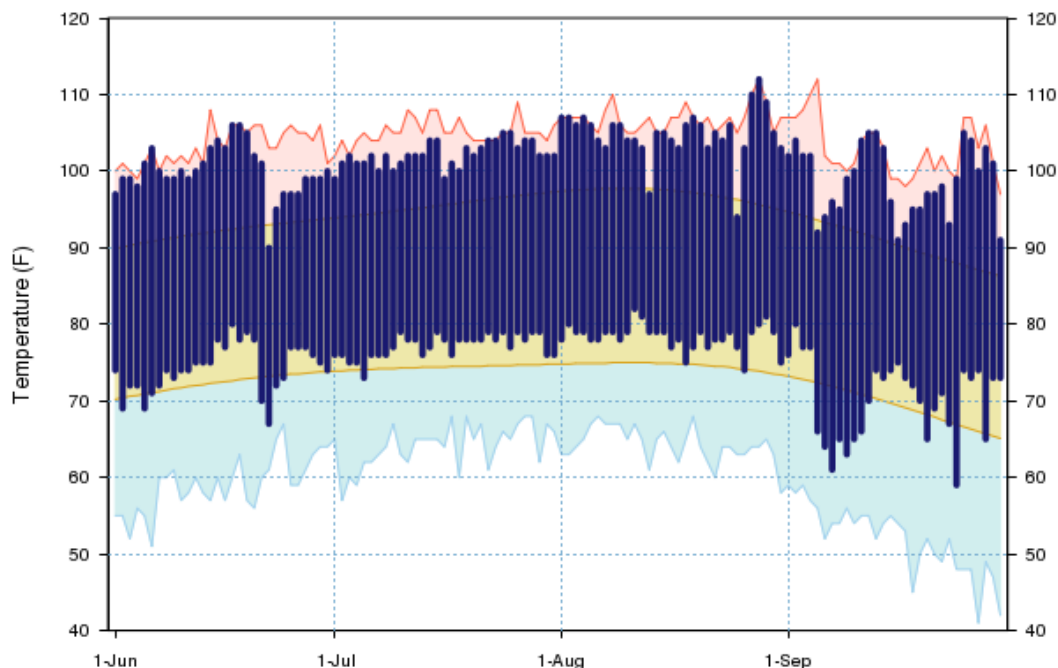
1. September of 1911 86.8
2. September of 1977 85.8
3. September of 2000 85.4
4. September of 1921 83.8
5. September of 1980 and 1997 83.6
- ...
10. September of 1962 and 2011 82.6

The warmest Septembers at San Antonio from 1885 to 2011 are listed below.

1. September of 1911 84.6
2. September of 2005 84.2
3. September of 1980 and 1986 83.7
4. September of 1931 83.3
5. September of 1933 and 2011 82.9

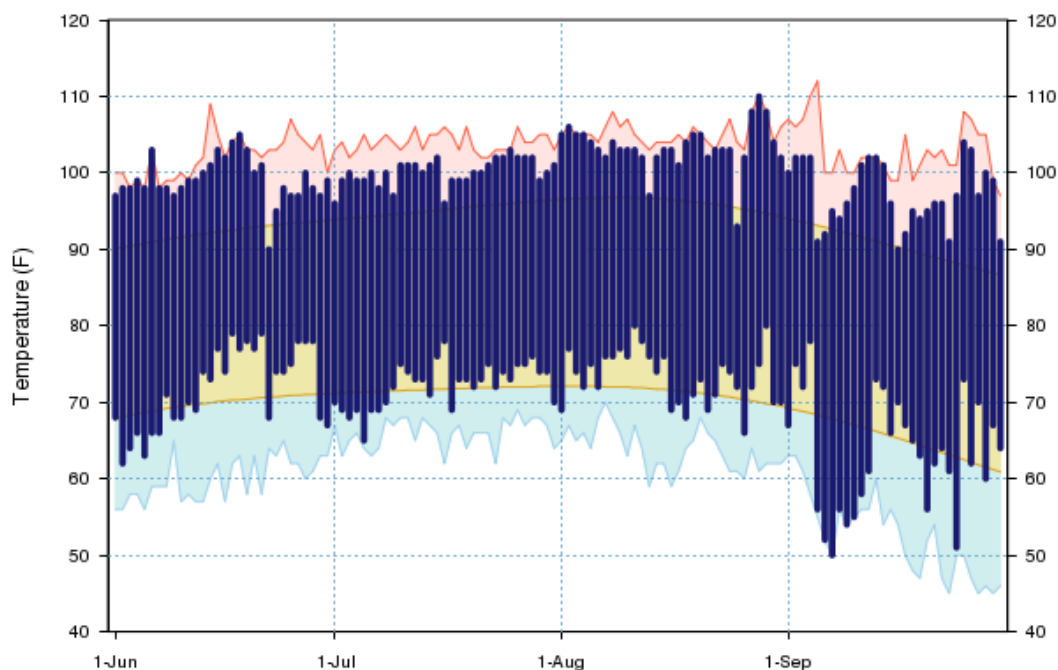
August 2011 and June to August 2011 was the warmest August and June to August of record at Austin Mabry, Del Rio, and San Antonio. The charts below illustrate the warm conditions that persisted from June to September 2011. A record number of 100 degree days have come to many locations across South Central Texas this year. A record number of 90 - 100 degree days were observed at Austin Mabry; 74 - 100 degree days at Austin Bergstrom; and 85 - 100 degree days at Del Rio in 2011 through the month of September. At San Antonio International Airport 57 - 100 degree days were observed, slightly below the record of 59 in 2009.

Temperature Summary for Austin Area
Jun 1, 2011 - Sep 30, 2011



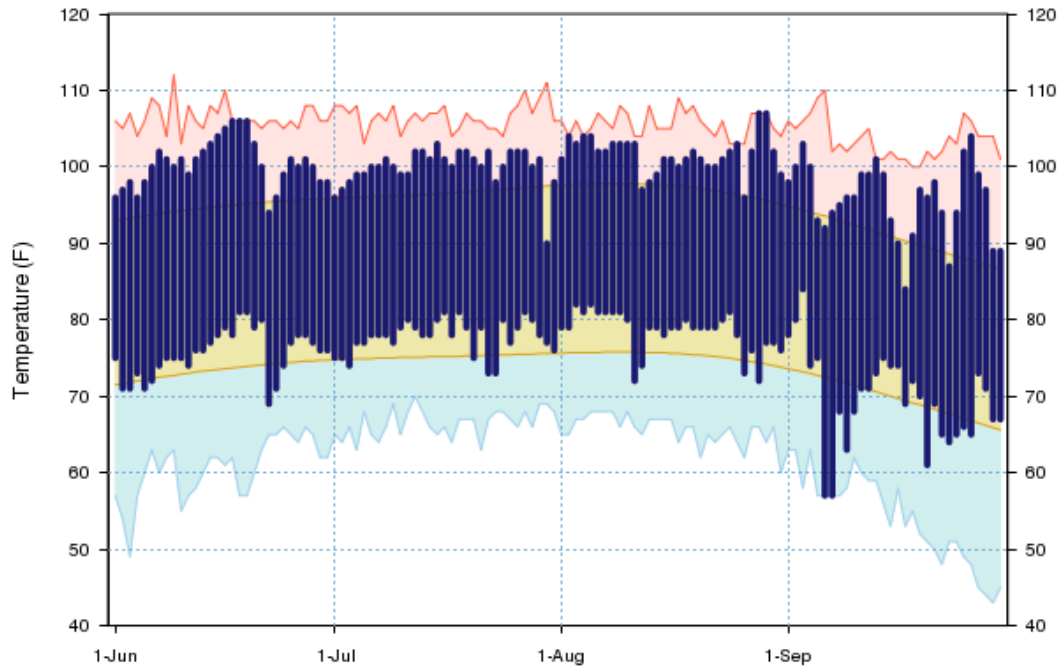
Observed daily maximum and minimum temperatures are connected by dark blue bars.
Area between normal maximum and minimum temperatures has tan shading.
Red line connects record high temperatures. Light blue line connects record low temperatures.

Temperature Summary for Austin-Bergstrom Airport Area
Jun 1, 2011 - Sep 30, 2011



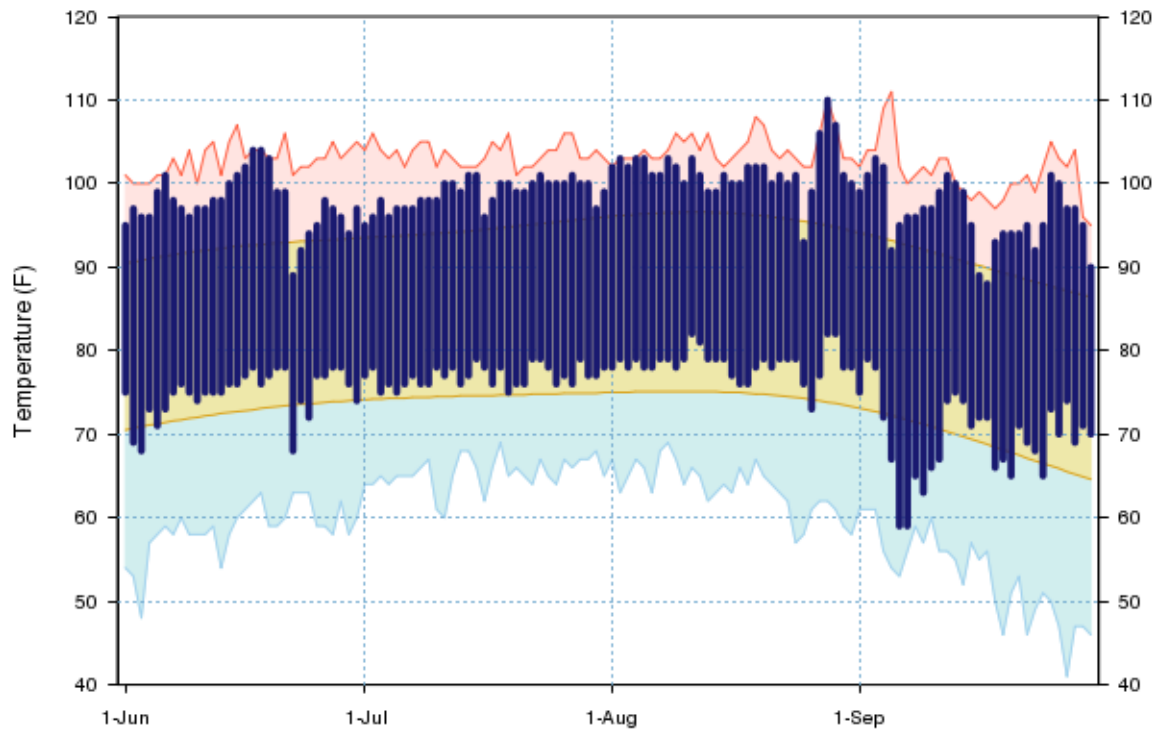
Observed daily maximum and minimum temperatures are connected by dark blue bars.
Area between normal maximum and minimum temperatures has tan shading.
Red line connects record high temperatures. Light blue line connects record low temperatures.

Temperature Summary for Del Rio Area Jun 1, 2011 - Sep 30, 2011



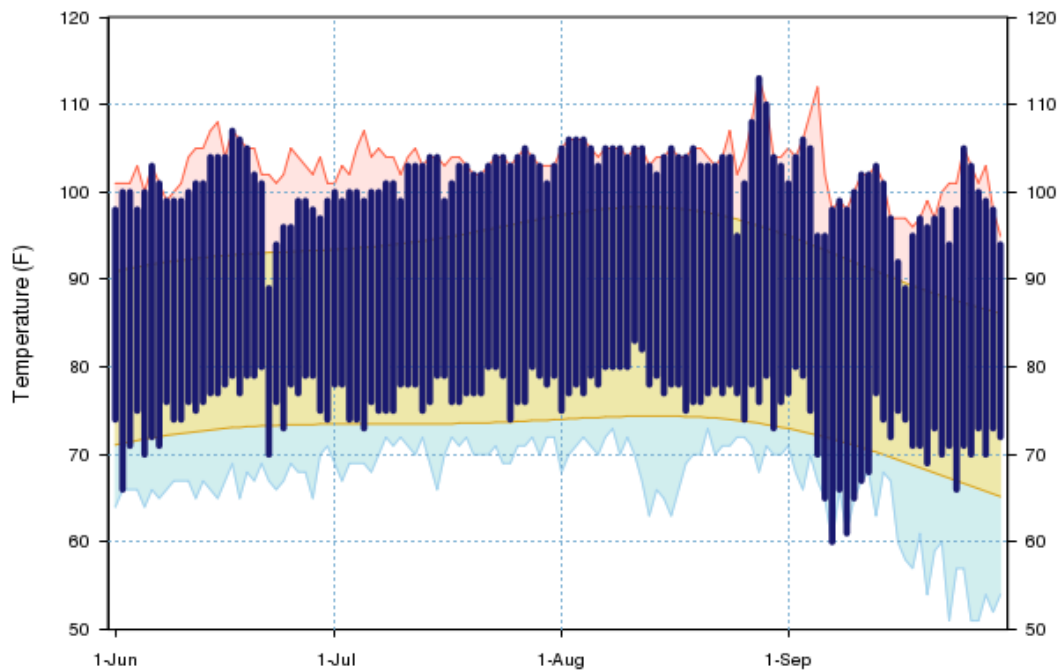
Observed daily maximum and minimum temperatures are connected by dark blue bars.
Area between normal maximum and minimum temperatures has tan shading.
Red line connects record high temperatures. Light blue line connects record low temperatures.

Temperature Summary for San Antonio Area Jun 1, 2011 - Sep 30, 2011



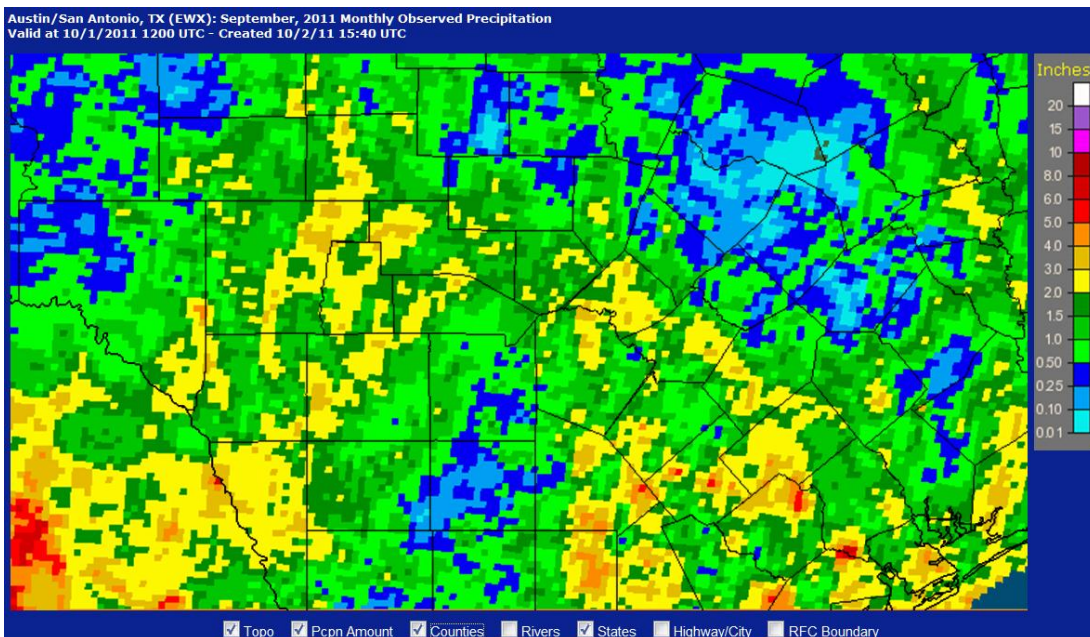
Observed daily maximum and minimum temperatures are connected by dark blue bars.
Area between normal maximum and minimum temperatures has tan shading.
Red line connects record high temperatures. Light blue line connects record low temperatures.

Temperature Summary for SAN ANTONIO STINSON AP
Jun 1, 2011 - Sep 30, 2011



Observed daily maximum and minimum temperatures are connected by dark blue bars.
 Area between normal maximum and minimum temperatures has tan shading.
 Red line connects record high temperatures. Light blue line connects record low temperatures.

The chart below shows September 2011 rainfall across South Central Texas. Rainfall of 0.01 inches at Austin Bergstrom, made September 2011 the driest September from 1943 to 2011 at Austin Bergstrom. Rainfall of 0.18 inches at Austin Mabry made September 2011 tie with September of 1878 for the 7th driest September at Austin Mabry from 1856 to 2011. Below normal rainfall of 1.14 inches at Del Rio and 2.93 inches at San Antonio was not in the top 10 driest Septembers for Del Rio or San Antonio.



In addition to the record heat, much drier than usual conditions have persisted since October 2010. From October 2010 to September 2011 at Austin and San Antonio January 2011 was the only month with rainfall above normal, while at Del Rio August 2011 was the only month with rainfall above normal.

October 2010 to September 2011 was the driest 1 year non-overlapping period at Austin Mabry since 1856, and the 5th driest 1 year non-overlapping period at San Antonio since 1871. At Del Rio August 2010 to July 2011 was the 3rd driest 1 year non-overlapping period since 1906.

The driest 1 year non-overlapping periods at Austin, Del Rio, and San Antonio are listed below.

At Austin Mabry, the driest 1 year non-overlapping periods from 1856 to September 2011 follow. The latest 30 year 1981 to 2010 normal for one year at Austin Mabry is 34.24 inches.

1. Oct. 2010 to Sep. 2011 11.20
2. Jan. 1954 to Dec. 1954 11.42
3. Oct. 1924 to Sep. 1925 11.83
4. Oct. 1955 to Sep. 1956 12.18
5. May 1977 to Apr. 1978 14.44
- Nov. 1916 to Oct. 1917 14.44
6. Jun. 1970 to May 1971 15.06
7. Sep. 2008 to Aug. 2009 15.38
8. Sep. 1878 to Aug. 1879 15.52
9. Oct. 1983 to Sep. 1984 16.86
10. Jul. 1993 to Jun. 1994 17.01

At Del Rio, the driest non-overlapping 1 year periods from 1906 to September 2011 follow. The latest 30 year 1981 to 2010 normal for One year at Del Rio is 19.52 inches.

1. Oct. 1955 to Sep. 1956 3.60
2. Aug. 1952 to Jul. 1953 4.22
3. Aug. 2010 to Jul. 2011 4.84
4. May 1917 to Apr. 1918 5.78
5. Nov. 1936 to Oct. 1937 5.87
6. Apr. 2001 to Mar. 2002 6.30
7. Oct. 1950 to Sep. 1951 6.32
8. Mar. 1933 to Feb. 1934 6.60
9. Sep. 1966 to Aug. 1967 6.88
10. Oct. 1988 to Sep. 1989 7.78

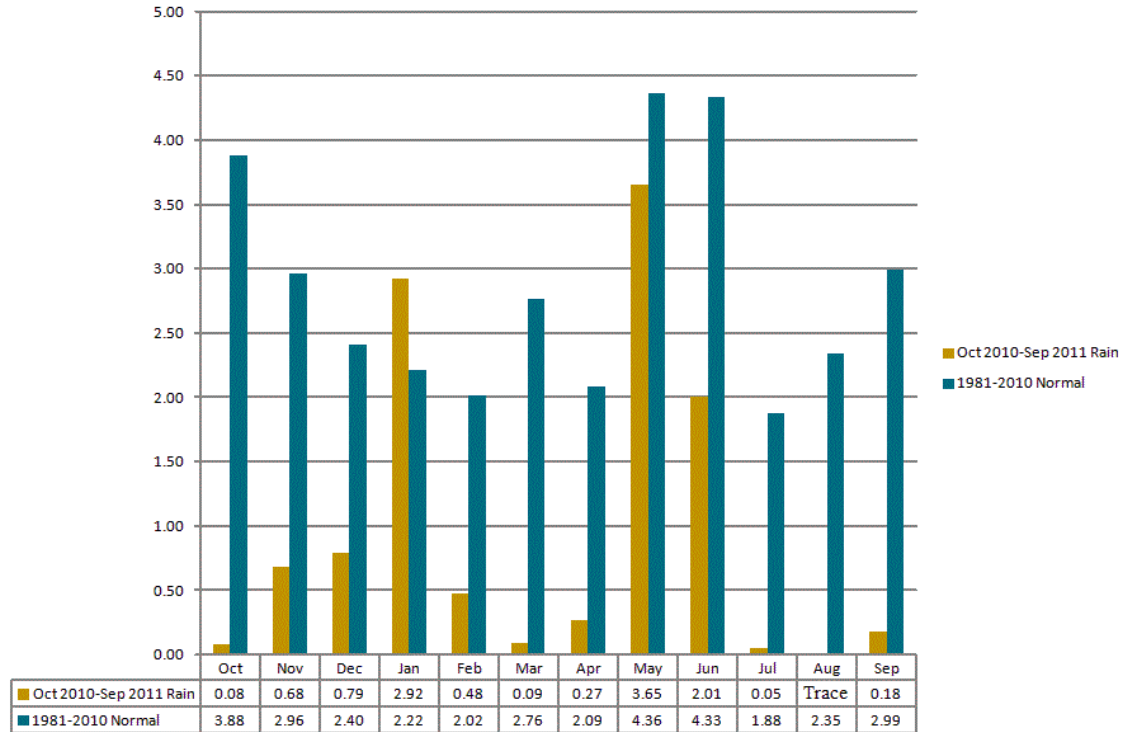
At San Antonio, the driest non-overlapping 1 year periods from 1871 to September 2011 follow. The latest 30 year 1981 to 2010 normal for one year at San Antonio is 32.27 inches.

1. Feb. 1917 to Jan. 1918 9.26
2. Sep. 2008 to Aug. 2009 9.41
3. Jul. 1924 to Jun. 1925 9.84
4. Aug. 1955 to Jul. 1956 10.51
5. Oct. 2010 to Sep. 2011 10.71
6. Apr. 2005 to Mar. 2006 12.27
7. Jun. 1970 to Aug. 1971 12.37
8. Jul. 1938 to Jun. 1939 12.95
9. Jun. 1897 to May 1898 13.21
10. Oct. 1909 to Sep. 1910 and Sep. 1909 to Aug. 1910 13.26 *
- Nov. 1953 to Oct. 1954 13.26

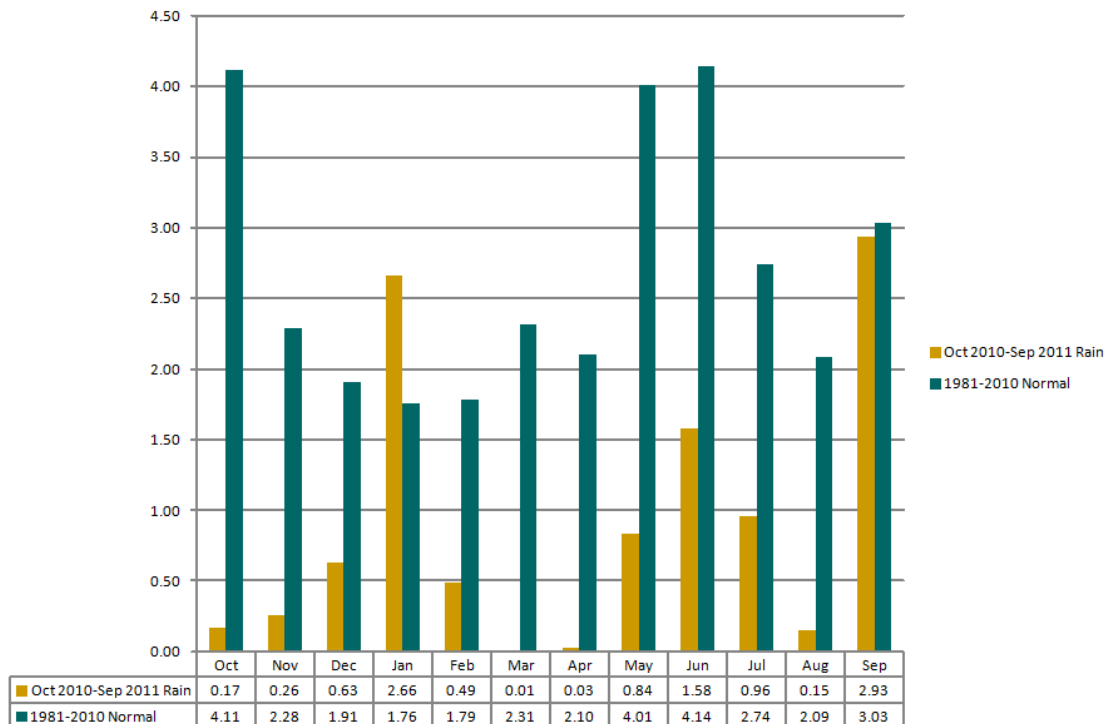
*Note, The same period, Oct. 1909 to Sep. 1910 and Sep. 1909 to Aug. 1910 are listed because they tied with Nov. 1953 to Oct. 1954 for 13.26 inches of rain.

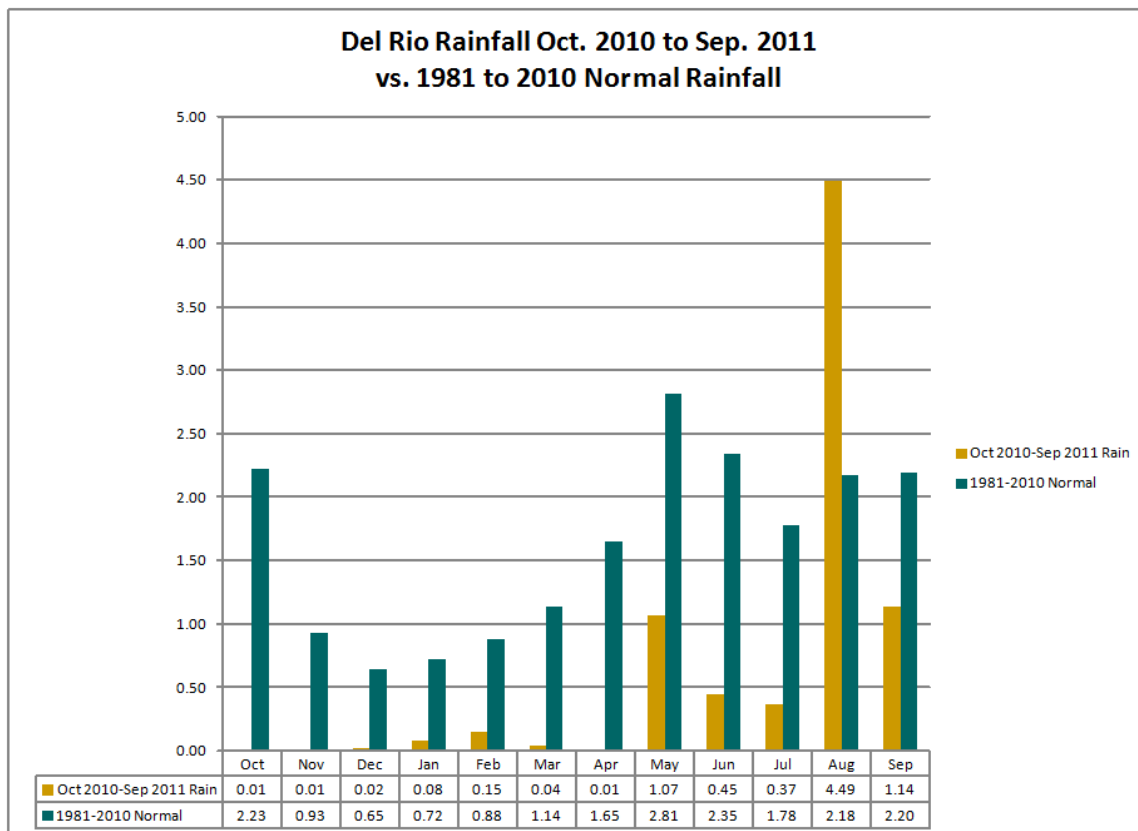
The charts below show the 1 year rainfall at Austin Mabry, San Antonio, and Del Rio from October 2010 to September 2011 compared to the latest 30 Year 1981 to 2010 Normals.

**Austin Mabry Rainfall Oct. 2010 to Sep. 2011
vs. 1981 to 2010 Normal Rainfall**

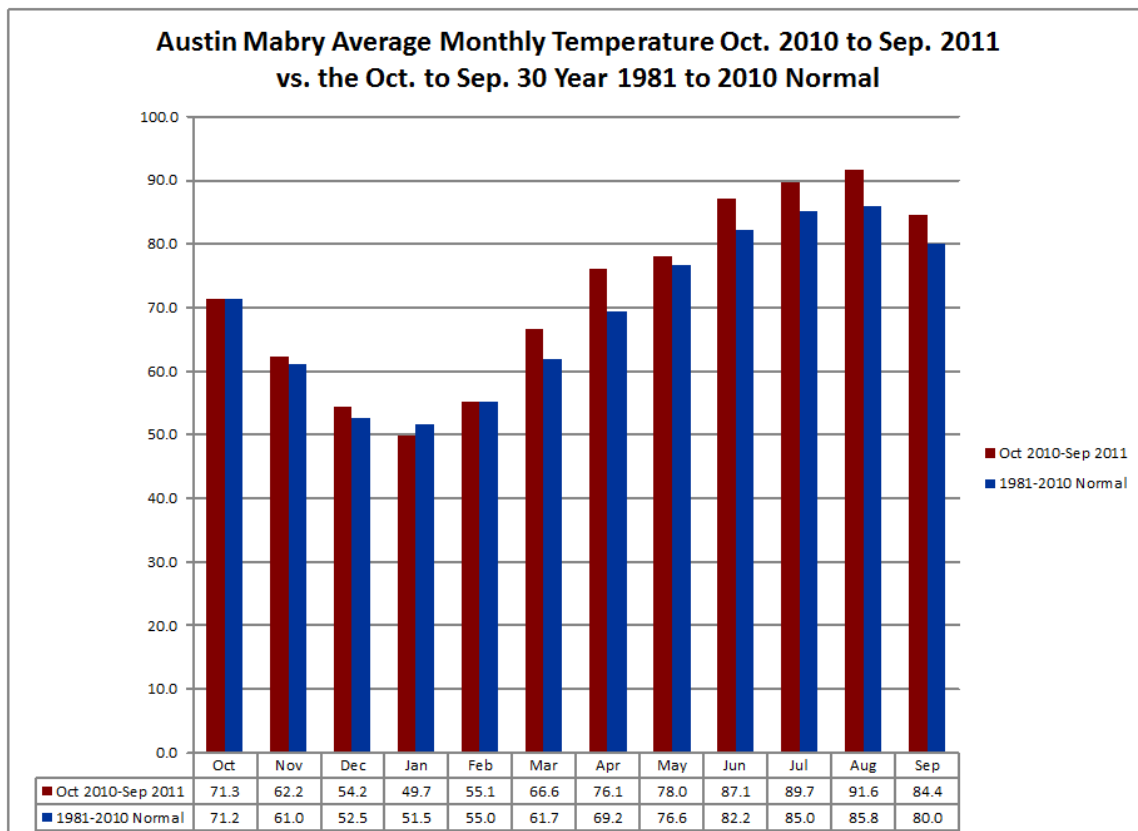


**San Antonio Rainfall Oct. 2010 to Sep. 2011
vs. 1981 to 2010 Normal Rainfall**

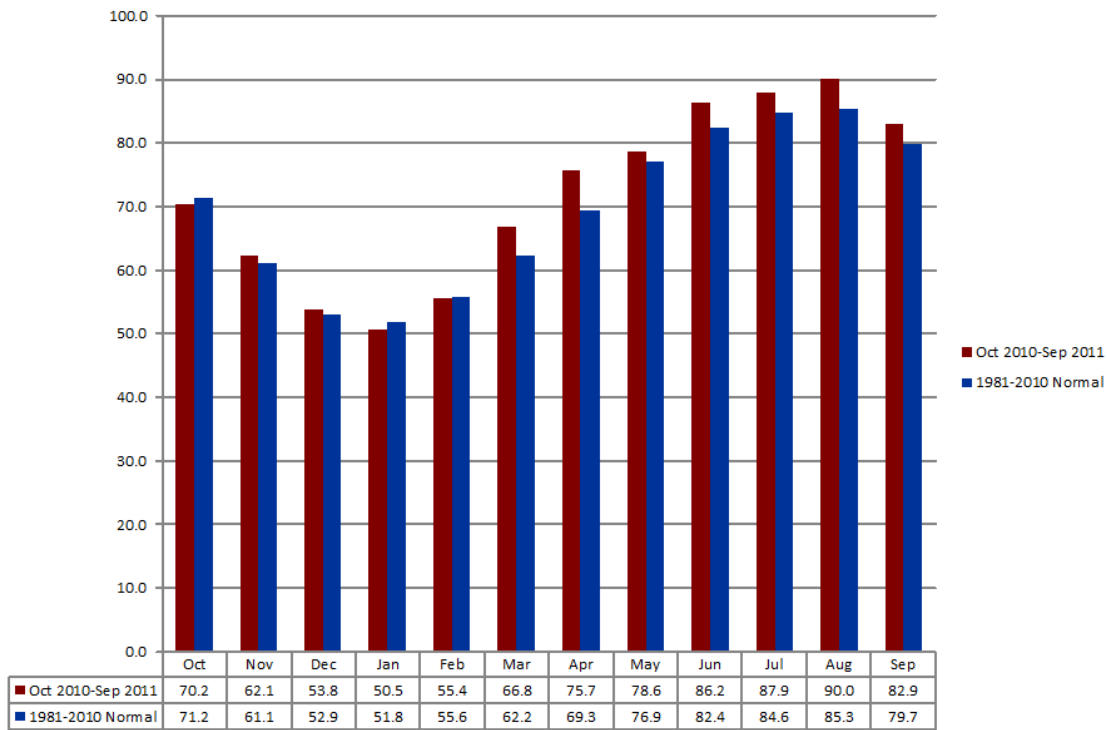




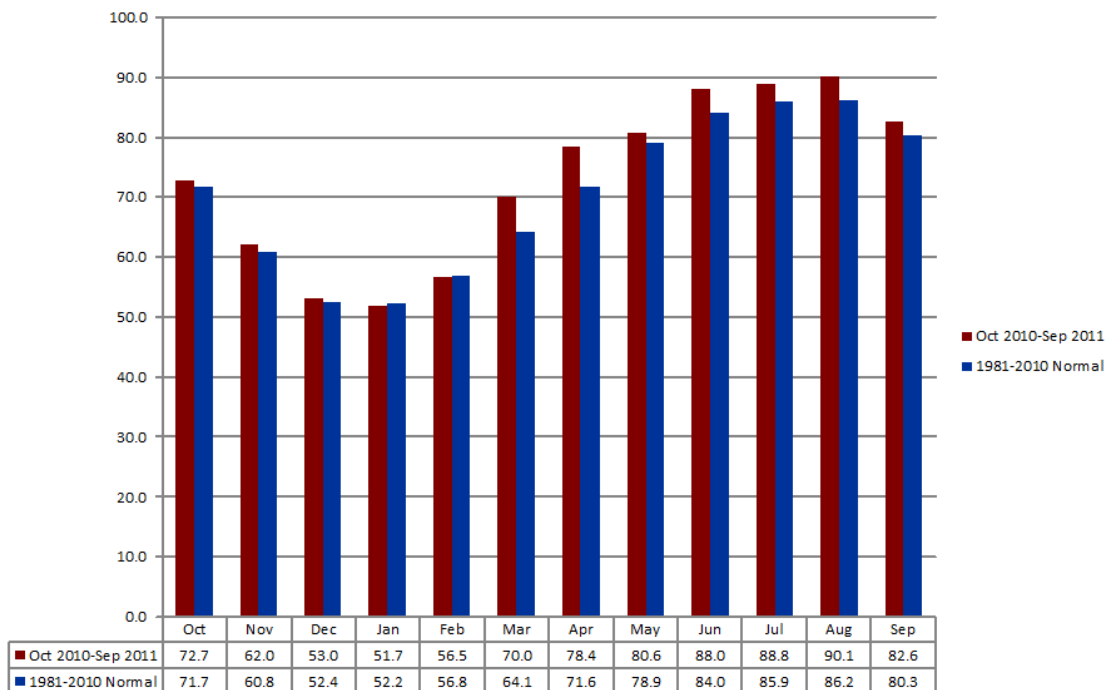
The charts below show the warm months from October 2010 to September 2011. In January and February of 2011, the frequent passage of cold fronts kept conditions near to slightly cooler than usual.



**San Antonio Average Monthly Temperature Oct. 2010 to Sep. 2011
vs. the Oct. to Sep. 30 Year 1981 to 2010 Normal**



**Del Rio Average Monthly Temperature Oct. 2010 to Sep. 2011
vs. the Oct. to Sep. 30 Year 1981 to 2010 Normal**



January to August 2011 Rainfall Rankings

The rainfall rankings for Year 2011 from January to September are listed below.

JANUARY TO SEPTEMBER 2011 WAS THE 2ND DRIEST JANUARY TO SEPTEMBER MULTI-MONTH PERIOD AT AUSTIN MABRY, WITH 9.65 INCHES OF RAIN, THE 3RD DRIEST JANUARY TO SEPTEMBER MULTI-MONTH PERIOD AT SAN ANTONIO WITH 9.65 INCHES OF RAIN, AND THE 13TH DRIEST JANUARY TO SEPTEMBER MULTI-MONTH PERIOD AT DEL RIO WITH 7.80 INCHES OF RAIN.

THE DRIEST JANUARY TO SEPTEMBER MULTI-MONTH PERIODS AT AUSTIN MABRY FROM 1856 TO 2011 IS LISTED BELOW.

- 1. JANUARY TO SEPTEMBER 1954 - 9.57**
- 2. JANUARY TO SEPTEMBER 2011 - 9.65**
- 3. JANUARY TO SEPTEMBER 1956 - 9.68**
- 4. JANUARY TO SEPTEMBER 1925 - 10.24**
- 5. JANUARY TO SEPTEMBER 1984 - 10.85**

THE DRIEST JANUARY TO SEPTEMBER MULTI-MONTH PERIODS AT SAN ANTONIO FROM 1871 TO 2011 IS LISTED BELOW.

- 1. JANUARY TO SEPTEMBER 1917 - 8.88**
- 2. JANUARY TO SEPTEMBER 1954 - 9.50**
- 3. JANUARY TO SEPTEMBER 2011 - 9.65**
- 4. JANUARY TO SEPTEMBER 1910 - 9.80**
- 5. JANUARY TO SEPTEMBER 1925 - 10.03**

THE DRIEST JANUARY TO SEPTEMBER MULTI-MONTH PERIODS AT DEL RIO FROM 1906 TO 2011 IS LISTED BELOW.

- 1. JANUARY TO SEPTEMBER 1956 - 2.05**
- 2. JANUARY TO SEPTEMBER 1937 - 3.51**
- 3. JANUARY TO SEPTEMBER 1933 - 4.82**
- 4. JANUARY TO SEPTEMBER 1952 - 6.14**
- 5. JANUARY TO SEPTEMBER 1951 - 6.28**
- ...**
- 13. JANUARY TO SEPTEMBER 2011 - 7.80**